

## Work Permit # DRL-2014-005 Work Order # Job# \_\_\_ Activity# \_\_\_

See "Instructions for Filling out the Work Permit" contained in the Work Planning and Control for Experiments and Operations Subject Area.

1. Work request WCC fills out this section.										
· · · · · · · · · · · · · · · · · · ·	,		Ext.: 2253		Dept/Div/Group: PO/PHENIX					
Other Contact person (if different from requester): Carter Biggs		ggs				Ext.: 7515				
Work Control Coordinator: Don Lynch	-	Start Date: 12/20/2013		Est. End Date: 6/30/2014						
Brief Description of Work: Repair/ remove	Drift Chamber on PHENIX West Carriage									
Building: 1008 Room: IR Equipment: DC V						Service Pro	vider: DC Expe	erts & PHENIX Technicians		
2. WCC, Requester/Designee, Service Provider, and ESS&H (as necessary) fill out this section or attach analysis										
ESS&H ANALYSIS										
Radiation Concerns         ☒ None         ☒ Activation         ☒ Airborne         ☒ Contamination         ☒ Radiation         ☒ NORM         ☒ Other										
☐ Special nuclear materials involved, notify Isotope Special Materials Group ☐ Fissionable/Radiological materials involved, notify Laboratory Nuclear Safety Officer										
Radiation Generating Devices: Radiography			☐ Moisture Density Gauges		☐Soil Density Gauges		i [	X-ray Equipment		
Safety and Security Concerns	☐ None		☐ Explosives		☐ Transport of Haz/Rad Material		d Material	☐ Pressurized Systems		
☐ Adding/Removing Walls or Roofs	☐ Critical Lift		☐ Fumes/Mist/Di	ust*	☐ Magnet	Magnetic Fields*		☐ Railroad Work		
☐ Asbestos*	☐ Cryogenic		☐ Heat/Cold Stre	ess	☐ Nanomaterials/particles*		cles*	Rigging		
☐ Beryllium*	☐ Electrical		☐ Hydraulic		☐ Noise*			☐ Silica*		
☐ Biohazard*			☐ Lasers*		☐ Non-ionizing Radiation*		on*	☐ Security Concerns		
☐ Chemicals/Corrosives*	☐ Excavation		☐ Lead*		Oxygen Deficiency*			☐ Suspect/Counterfeit Items		
☐ Confined Space*	Confined Space*				☐ Penetrating Fire Walls		lls	☐ Vacuum		
* Safety Health Rep. Review Required	' Safety Health Rep. Review Required Haz, Rad, Bio Materia			al Exceed DOE 151.1-C Levels - Contact C		EM		□ Other Purge Flammable Gas Prior to repair procedure		
Environmental Concerns			None		☐ Work in	npacts Enviro	nmental Permi	it No.		
☐ Atmospheric Discharges (rad/non-rad)		C	Land Use Institutional Controls		☐ Soil Activation/contamination		mination	☐ Waste-Mixed		
☐ Chemical or Rad Material Storage or U	se		Liquid Dischar	ges	☐ Waste-	Clean		☐ Waste-Radioactive		
☐ Cesspools (UIC)			Oil/PCB Mana	gement	☐ Waste-	Hazardous		☐ Waste-Regulated Medical		
☐ High water/power consumption			☐ Spill potential		☐ Waste-Industrial			☐ Underground Duct/Piping		
Waste disposition by:								☐ Other		
Pollution Prevention (P2)/Waste Minimize	ation Opportunity	: [	⊠ No □ Yes							
FACILITY CONCERNS			☐ Intermittent Energy Release							
Access/Farrer Limitations	☐ Electrical No	ise [	☐ Potential to Cause a False Alarm					☐ Vibrations		
☐ Access/Egress Limitations ☐ Impacts Facility Us		ility Use Agr	Agreement		☐ Temperature Change		е	☐ Other		
☐ Configuration Management	☐ Maintenanc	Work on V	n Ventilation Systems		☐ Utility Interruptions					
WORK CONTROLS										
Work Practices										
☐ None ☐ Exh	naust Ventilation	Ventilation ☐ Lockout/Tagout			☐ Spill Containment ☐ Sec		☐ Secur	urity (see Instruction Sheet)		
□ Back-up Person/Watch   □ HP	Coverage	☐ Postir	ng/Warning Signs		☐ Time Limitation ☐ Other		☐ Other	er		
☐ Barricades ☐ IH S	Survey	☐ Scaffo	olding-requires ins	es inspection		g Alarm (i.e. '	arm (i.e. "high level")			
Personal Protective Equipment										
☐ None	☐ Ear Plugs		⊠ Gloves as appropriate		☐ Lab Coat					
☐ Coveralls	☐ Ear Muffs		Goggles		☐ Respirator*			☐ Safety Harness		
☐ Disposable Clothing ☐ Face	e Shield	Hard Hat	☐ Shoe C	overs	□ Safet	y Shoes	☐ High v	visibility cloths/vest		
Permits Required (Permits must be valid w	vhen job is schedu	ed.)								
None     Non	☐ Cutting/Welding ☐ Impair Fire Protection Systems									
☐ Concrete/Masonry Penetration ☐ Digging/Core Drilling		L	☐ Rad Work Permit-RWP No							
☐ Confined Space Entry	☐ Electrical W Hot	orking E	☐ Other							
Dosimetry/Monitoring										
None     Non	☐ Heat Stress	Monitor	☐ Real T	ime Monito	r		☐ TLD			
☐ Air Effluent	☐ Noise Surve	y/Dosimeter	er Self-reading Pencil Dosimete		cil Dosimeter	☐ Waste Characterization		aracterization		
☐ Ground Water	☐ O <sub>2</sub> /Combustible Gas		Self-reading Digital		al Dosimeter		Other			
☐ Liquid Effluent ☐ Passive Vapor Monit		or Monitor	or Sorbent Tube/Filter Pur		er Pump	Pump				
Training Requirements (List specific tra	aining requirement	s)								
C-A User or equiv. , PHENIX Awareness, LockOut/TagOut affected										
	LockOut/TagOut	Based on analysis above, the Review Team determines the risk, complexity, and  If using the permit when all hazard ratings are low, only the following need to sign: (								
coordination ratings below:  Although allowed, there is no need to use back of form)										
ECCOLL Diale Land	am determines th	_	<u> </u>		h allowed, th	nere is no ne		k of form)		
ESS&H Risk Level:	am determines th	Moderate	e  High		h allowed, th WCC:	nere is no ne Don Lynch		k of form) Date:		
ESS&H Risk Level: Complexity Level: Work Coordination:	am determines the Low [	_	High		h allowed, th	nere is no ne Don Lynch vider:		k of form)		

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Work Plan (procedures, timing, equip		ifications, and personnel availability need to be		e Attached			
Special Working Conditions Required	d (e.g. Industrial Hygiene hold noint	c or other monitoring)					
	1 (e.g., iliuustilai Hygiene noiu pointa	of other monitoring)					
None  Notifications to operations and Opera	etional Limite Pequirements: None		_	_			
Post Work Testing, Notification or Do	<u>'</u>						
Job Safety Analysis Required: Y	<u>.</u>	Raview Done: M in seri	Review Done: ⊠ in series □ team				
1000 Galety Alianysis resquired.	<u>es                                    </u>	TOVIOW DOTIO. KN IN CO.	es 🗀 team				
that could impact ESS&H have been	considered and controls established	m members were appropriate for the work that d according to BNL requirements. In addition, the shave been identified and recorded on this per	this signature indicates that applica				
Title	Name (print)	Signature	Life #	Date			
ES&H Professional							
F&O Facility Project Manager							
Service Provider							
Work Control Coordinator	Don Lynch		20146				
Safety Health Representative							
Research Space Manager							
Other							
Other							
Required Walkdown Completed							
*Primary Reviewer							
	performing work have read and under	ection. erstand the hazards and permit requirements (i ures also includes verification that worker trainir Contractor Supervisor:					
Workers:	Life#:	Workers :	Life#:				
Workers are encouraged to provide fe	eedback on ESS&H concerns or on	ideas for improved job work flow. Use feedbac	k form or space below.				
5. Department/Division, or the	oir aguivalant Lina Managar	or Docience					
Conditions are appropriate to start wo	<u> </u>	•	1				
	ork: (Permit has been reviewed, wor	k controls are in blace and site is ready for job.	VIII				
Name:	,	Life#:	Date:				
Name:	Signature:						
6. Worker provides feedback.	Signature:						
6. Worker provides feedback. Worker Feedback (use attached sh	Signature:	Life#:					
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